

A2 5. (Amended) The pharmaceutical composition of claim 2 wherein the cephalosporin is selected from the group consisting of ceftiofur, cefipime, cefixime, cefoperazone, cefotaxime, cefpodoxime, ceftazidime, ceftizoxime, ceftriaxone, cefpirome, cefclidin, cefmenoxime, cefozopran, and combinations thereof.

12. (Reiterated) The pharmaceutical composition of claim 5 wherein the cephalosporin is ceftriaxone.

14. (Amended) The pharmaceutical composition of claim 2 wherein the metal cation is selected from the group consisting of calcium, magnesium, lithium, iron, copper, zinc, aluminum, manganese, chromium, cobalt, nickel, and combinations thereof.

A3 15. (Amended) The pharmaceutical composition of claim 12 wherein the metal cation is calcium.

16. (Amended) The pharmaceutical composition of claim 12 wherein the metal cation is zinc.

17. (Amended) The pharmaceutical composition of claim 2 wherein the metal cation is ionically bound to the biopolymer forming a metal cation-biopolymer complex and the cephalosporin is contained within the metal cation-biopolymer complex.

18. (Amended) The pharmaceutical composition of claim 2 wherein the metal cation is ionically bound to the cephalosporin forming a metal cation-cephalosporin complex and the metal cation-cephalosporin complex is contained within the biopolymer.

19. (Amended) The pharmaceutical composition of claim 2 wherein the metal cation is complexed to the cephalosporin and the metal cation is further ionically bound to the biopolymer forming a cephalosporin-metal cation-biopolymer bridge.

20. (Amended) The pharmaceutical composition of claim 2 wherein the biopolymer is carrageenan or pectin.

A3 21. (Amended) The pharmaceutical composition of claim 15 or 20 wherein the carrageenan has a calcium content of less than about 0.4% by weight.

22. (Amended) The pharmaceutical composition of claim 2 wherein the biopolymer is carrageenan, the cephalosporin is ceftriaxone, the metal cation is calcium and the absorption enhancer is a non-ionic surfactant.

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